

REMARKS/ARGUMENTS

Claims 1-85 are pending in the application. The Examiner has withdrawn claims 38-85 from consideration. Claim 1 has been amended to indicate the molecular weight of the polymer in (a) and to indicate that the fluorocarbon polymer (b) is dispersed in a solution of the polymer (a) in a solvent (b). The amendment is supported at, for example, paragraphs [0017] and [0026]. Claims 5, 6, 19, and 23 have been amended to more particularly indicate the molecular weight of the (meth)acrylate polymer. The amendments are supported at, for example, paragraph [0026]. Claims 2, 18, 20, 32-34, and 36 have been amended to correct obvious typographical errors.

The Examiner has restricted the invention under 35 U.S.C. § 121, identifying the following claim groups:

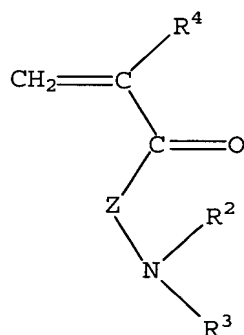
- I. Claims 1-37, drawn to a composition, classified in class 525, subclasses 199, 200, and 217.
- II. Claims 38-52, 54-68, and 70-84, drawn to a method, classified in class 427, subclass 421.
- III. Claims 53, 69, and 85, drawn to an article, classified in class 428, subclass 421.

Applicants traverse the restriction requirement on the grounds that the restriction is unduly expensive and burdensome on Applicants, requiring the possible filing of two or more divisional applications directed to the non-elected inventions while, at the same time, presenting little, if any, burden to the Patent Office. As MPEP § 803 states, "If the search and examination of an entire

application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to distinct or independent inventions." Because the present claims can be more efficiently and effectively grouped as one invention, removal of the Restriction would not place an undue burden on the Examiner.

Should the Examiner be unpersuaded by Applicants' arguments, Applicants affirm the election of Examiner's Group I (claims 1-37) and request that they be examined on the merits with traverse.

The present invention is directed to a coating composition that includes a fluorocarbon polymer dispersed in a solution that includes an amine containing polymer in a solvent. The amine containing polymer includes one or more (meth)acrylate monomers and one or more aminoalkyl(meth)acrylate monomers described by the structure:



where Z is a divalent linking group; R² and R³ are independently selected from H or C₁-C₆ linear or branched aliphatic; and R⁴ is H or CH₃. The polymer has a weight average molecular weight of from 5,000 to 20,000.

35 U.S.C. § 102 Rejections

Claims 1-4, 7-9, 12-17, 19-22, 25, 26 and 29-33 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 3,944,689 to Luckock et al. (hereinafter "Luckock").

Luckock discloses a composition that includes a copolymer of vinylidene fluoride and tetrafluoroethylene or perfluoropropene and an acrylate polymer in a solvent comprising 2-nitropropane, cyclohexanone or dimethylacetamide, or a combination of such solvents. The examples cited by the Examiner show the composition to be a solution.

Luckock does not disclose high resin solids compositions where a high molecular weight fluorocarbon polymer is dispersed in a continuous phase that includes the claimed low molecular weight (meth)acrylate polymer (a) and a solvent.

In prior art systems, low molecular weight polymers are often used in order to allow for higher solids and a useable viscosity for a composition. However, such systems typically provide coatings having poor flexibility. The inventive compositions provide a high solids composition that is able to include a high molecular weight fluorocarbon polymer and provide coatings that have good flexibility (see the Examples, pages 11-16 of the specification).

In order to anticipate a claim, a prior art reference must disclose every limitation in the claim. There is no teaching or suggestion in Luckock directed to high solids coatings as presently claimed. Therefore Luckock does not anticipate the amended claims and the rejection under 35 U.S.C. 102(b) should be withdrawn.

Claims 1-4, 7, 9, 10, 12-14, 17-22, 25, 28-30, and 33 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,786,546 to Vassiliou (hereinafter "Vassiliou").

Vassiliou discloses a primer that includes an acrylic copolymer and polyvinyl fluoride used with a topcoat of polyvinyl fluoride.

Vassiliou does not disclose high solids coatings as in the present invention where a low molecular weight amine containing polymer provides improved dispersion properties resulting in higher solids coatings having a lower viscosity and lower VOC (see Examples, especially paragraphs [0049] to [0051]). The molecular weight is important for the dispersant properties of the amine containing polymer in the amended claims because when the molecular weight is too high, the desired high solids can not be obtained. When the molecular weight is too low, durability of the coating can be affected. Vassiliou does not provide any teaching or suggestion to improving such properties.

Coatings formed from higher solids dispersions, as in the amended claims, are advantageous because a thicker film can be applied from a lower volume of coating composition. This is advantageous because of faster drying times, less VOC emission, and fewer coating layer applications.

In order to anticipate a claim, a prior art reference must disclose every limitation in the claim. There is no teaching or suggestion in Vassiliou directed to high solids coatings as presently claimed. Therefore Vassiliou does not anticipate the amended claims and the rejection under 35 U.S.C. 102(b) should be withdrawn.

35 U.S.C. § 103 Rejections

Claims 1-37 stand rejected under 35 U.S.C. 103(a) as being obvious over Luckock and Vassiliou. The Examiner indicates that the specific weight average molecular weight of the (meth)acrylate copolymer and the specific monomeric constituents are parameters

that one skilled in the art could manipulate to maximize benefits. Applicants respectfully disagree.

In order to modify a prior art reference, the Examiner must provide some motivation as to why one skilled in the art would so modify the reference. In the present application, the Examiner merely states that one skilled in the art could modify the disclosed polymers and, therefore, the modification would be obvious. The Examiner's rationale does not meet the standard required under 35 U.S.C. 103(a).

Applicants sought to provide "a higher solids, lower VOC content liquid fluoropolymer coating composition, which would allow for higher line speed application, reduced blistering tendency of the applied coating, and a reduced impact on the environment from VOCs." Applicants were able to meet the stated requirements by using the coating composition of the amended claims, the molecular weight of the amine containing polymer being a key component in providing a coating composition that satisfied the stated requirements.

There is no disclosure in Luckock or Vassiliou, either alone or in combination that teaches, suggests or would motivate one skilled in the art to arrive at the coating composition of the amended claims. Therefore, the rejection under 35 U.S.C. 103(a) should be withdrawn.

In view of the above amendments and remarks, reconsideration of the rejections and allowance of claims 1-85 are respectfully requested.

All correspondence regarding this application should be sent
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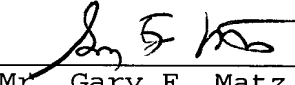
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The Examiner is encouraged to contact the above should there
be any questions regarding this Amendment.

Respectfully submitted,

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